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Demand for second-stage land certification in Ethiopia: Evidence from household panel data

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ABSTRACT

Ethiopia has implemented one of the largest, fastest and least expensive land registration and certification reforms in Africa. While there is evidence that this 'first-stage' land registration has had positive effects in terms of increased investment, land productivity and land rental market activities, the government is now piloting another round of land registration and certification that involves technically advanced land survey methods and computer registration. This 'second-stage' land registration differs from the registration system employed in the first round that used field markings in conjunction with neighbors' recollections to identify plot borders. We use panel data from 600 households in southern Ethiopia to investigate household perceptions of and demand for such a new registration and certification. Our study revealed relatively low demand and willingness-to-pay (WTP) for second-stage certificates. The WTP also decreases significantly from 2007 to 2012. Our findings indicate that farmers do not believe that the second-stage certificate enhances tenure security relative to the first-stage certificate except in instances in which first-stage certification was poorly implemented. The demand for second-stage certificates appears to come primarily from governmental authorities, as it can provide a better basis for land administration and produce accessible public documentation of land-related affairs.

Introduction

Ethiopia has implemented one of the largest, fastest and least expensive land registration and certification reforms in Africa (Deininger et al., 2008). While there is some variation in how land registration and certification has been implemented across, and even within, regions in Ethiopia, the broad-scale first-stage land registration and certification involved the registration and demarcation of land plots using simple local technologies that required little training. The main sources for determining plot boundaries were field markings, in conjunction with the memories of the neighbors whose farm plots border those owned by the households in question. Measuring tapes and ropes were used to measure the farm plots. While the initial cost of this registration was extremely low (approximately 1 US$ per farm plot or less), its impact in improving tenure security has been significant, as evidenced by increased investment, land productivity and land rental market activity (Deininger et al., 2008, 2011; Holden et al., 2009, 2011a; Bezabih et al., 2012).

However, the first-stage certification had limitations with respect to the maintenance and updating of land registration records. Ethiopia has begun piloting and introducing a second-stage land registration and certification in selected districts in the highland regions. The new registration and certification system involves registering the precise geographical locations and sizes of individual farm plots using technologies such as GPS, satellite imagery or orthography. Farmers receive plot-level certificates with maps rather than a household-level certificate. The aim is that the second-stage land registration and certification effort will enhance tenure security, the maintenance and updating of records, and land management (MOA, 2013b).

The second-stage land registration and certification will likely be substantially more costly than the first-stage certification and will also require much longer to complete. If the primary purpose of the second-stage certificate is to increase tenure security for farmers, it is important to explore their perceptions of, interest in and willingness-to-pay (WTP) for such plot-level certificates that include maps. During the first-stage certification, farmers typically paid a fee to receive their certificates. If planners expect that part of the costs of the second-stage certification will also be recouped through such a fee, given the high budgetary costs associated with this project, the farmers' WTP should be estimated. We use data from 600 households in Oromia region and

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Southern Nations, Nationalities and Peoples (SNNP) region to investigate household perceptions of and WTP for such a second-stage certificate. We assessed the WTP in monetary terms and using the number of labor-days that households were willing to supply in exchange for the second-stage land certificates. Our data cover substantial variation in agro-ecological conditions, market access and urban expansion. The household panel data from 2007 and 2012 allow us to assess how the demand for second-stage certificates has changed over time in our study areas. The findings should be highly relevant for the design of future land administration reforms in Ethiopia and elsewhere, e.g., to identify the types of areas to target first and whether the recipients are willing to pay a large share of the costs of the second-stage reform.

The analyses reveal limited interest in the second-stage certificate, especially compared to the first-stage certificate. Both the general interest in second-stage certificates and the amounts that interested households are willing to pay for such a certificate declined from 2007 to 2012. Our econometric analyses indicate that households that participated in public meetings concerning the first-stage registration and certification and households that experienced land disputes before the first-stage registration are more likely to show interest in a second-stage certificate. However, male headed households for which only the name of the husband appears on the first-stage certificate and households that had sufficient witnesses for border demarcation exhibit low interest in a new certificate. Households that have larger land holdings have lower WTP.

Literature review

Land registration and land titling

A land title is a written document providing proof of ownership, and this ownership is also recorded in a publicly recognized central land registry. Modern land titles are associated with high quality and accurate maps and coordinates that can be used to verify the exact spatial boundaries of such property. Upgrading land-titling systems has been a gradual process in most countries due to the costly and time-consuming nature of the work. In many countries, this has been a demand-based process in which those demanding the title have had to pay for the costs. Such procedures have often been associated with slow bureaucratic processes and numerous steps that have created opportunities for corruption, rent-seeking and "elite capture". They have also created an unleveled playing field where the poor and less connected have typically been marginalized. Many have therefore become skeptical of formalizing land rights through land titling in developing countries contexts such as in Africa. Land titling has been perceived as a threat to customary land rights (Benjaminsen et al., 2009; Cotula et al., 2004). Some have challenged the very claim that land registration and titling have the potential to improve production in poor countries, particularly in Africa (Atwood, 1990; Bromley, 2008). They argue that the premises on which this claim is based, such as land registration providing small farmers with access to credit or encouraging them to invest in their land, are themselves based on a simplistic model of rural land rights (Atwood, 1990) and have not been supported by strong empirical evidence (Bromley, 2008).

Feder and Nishio (1999) reviewed successful land registration and titling programs in Asia and Latin America and observed positive effects on investment, credit access, land productivity and land value. Such effects were found in Thailand, The Philippines (urban areas), Indonesia (urban areas), Honduras, Paraguay, and Peru. A study in rural India (Pender and Kerr, 1994) found no significant positive effects on investment or credit access. Studies on Africa (Ghana, Kenya and Rwanda) (Migot-Adholla et al., 1991) found that land registration had no significant impact on land productivity, land investment or credit access. Jacoby and Minten (2007) also found no significant effects of land titling in Madagascar. Besley (1995), however, found a positive effect of new land rights on investment in trees in one area in Ghana. Feder and Nishio (1999) emphasize that numerous prerequisites have to be in place before the positive impacts of land registration can be achieved, including weaknesses in existing formal or informal tenure systems that therefore do not provide the necessary tenure security that is essential for investment. Positive impacts on access to credit markets and land markets will not occur unless such markets exist. Lending institutions cannot use land as collateral unless there is a well-functioning land sales market. Land laws and land administrations capable of implementing the laws and land registration and titling systems in a transparent and reliable manner and with clear conflict resolution systems are essential. There is a risk that the introduction of a modern registry system to replace a traditional tenure system could result in land grabbing ("elite capture") by better informed, more influential and wealthier stakeholders. There are fears that the effect could increase landlessness and result in the formalization of land rights having negative effects on the poor. Local participation in the process and simple, efficient and transparent procedures are also important for creating popular demand and success.

Both customary and statutory tenure systems have tended to exhibit a gender bias in favor of men over women. Land titles have typically been allocated to the head of the household, who in most cases is a man. There have been numerous cases in which formalizing land rights through land titling has undermined customary land rights, which have been ignored or disrespected.

Costs of formalizing land rights

The high cost of land titling has forced many countries to establish a system of land titling on demand, and this has made land titles costlier and only available to the wealthy (Benjaminsen et al., 2009; Besley and Burgess, 2000; Cotula et al., 2004; Deininger, 2003). Therefore, there is substantial need for more low-cost, broad-scale and egalitarian systems for land registration in low-income countries. In Honduras, the cost of land titling was estimated at 600 US$ per title (Lopez, 1996), while in Madagascar it has been estimated at 150 US$ per household under the conventional system of titling on demand (Jacoby and Minten, 2007). Burns et al. (2007) assessed the variation in costs across numerous countries and found average costs of between 20 and 55 US$ per parcel. Ayalew et al. (2011) provide an estimate of the costs of hiring private surveyors for titling on demand for urban land owners in Dar es Salaam, Tanzania of approximately 350 US$. The Ethiopian first-stage land registration and certification system lies at the other extreme, where the cost of registration and certification was estimated to be approximately 1 US$ per farm plot or 3.5 US$ per household (Deininger et al., 2008).

In assessing the optimal quality level in a land formalization scheme, it is important to assess the marginal benefits versus marginal costs of increasing the formalization quality of land rights. As Deininger and Feder (2009) note, there are many examples of supply-driven land formalization programs that were implemented based on lobbying by survey professionals and lead to excessively high technical standards relative to the demand for such formalization and the actual land values. Such programs may even have created competition with traditional tenure systems and undermined the latter. This may also explain why some conventional land-titling programs such as in Kenya and Madagascar have not resulted in any significant impacts (Migot-Adholla et al., 1991; Jacoby and Minten, 2007) and others have resulted in speculative behavior that has created conflicts (Benjaminsen et al., 2009). The